



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,536	04/19/2006	Juha Karttunen	879A.0064.U1(US)	3744
29683 7590 10/27/2008 HARRINGTON & SMITH, PC 4 RESEARCH DRIVE, Suite 202 SHELTON, CT 06484-6212				
EXAMINER				
FANG, PAKEE				
ART UNIT		PAPER NUMBER		
4146				
MAIL DATE		DELIVERY MODE		
10/27/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/576,536

**Applicant(s)**

KARTTUNEN, JUHA

**Examiner**

PAKEE FANG

**Art Unit**

4146

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 April 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-19 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 04/19/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-854)  
Paper No(s)/Mail Date See Continuation Sheet  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :07/28/2008, 01/08/2007, & 04/19/2006.

### **DETAILED ACTION**

**1. Claims 1 - 19 are presented for examination.**

The claims and only the claims form the metes and bounds of the invention. "Office personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. The Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

#### ***Priority***

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in the application filed on 04/19/2006.

#### ***Information Disclosure Statement***

3. The information disclosure statements (IDS) submitted on 07/28/2008, 01/08/2007, & 04/19/2006 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

***Specification***

4. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) If a machine or apparatus, its organization and operation;
- (2) If an article, its method of making;
- (3) If a chemical compound, its identity and use;
- (4) If a mixture, its ingredients;

(5) If a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

5. The abstract of the disclosure is objected to because of the improper introduction of labels for the drawing and the abstract should be on a separate sheet or page, not in the form which the applicant has provided from the first page of foreign application. Correction is required. See MPEP § 608.01(b)

6. The disclosure is objected to because of the following informalities: there are numerous grammatical, spelling, and syntax errors. Appropriate correction is required.

7. The specification is objected to because the lack of Section Headings Like "RELATED APPLICATIONS DATA; TECHNICAL FIELD; BACKGROUND OF THE INVENTION; SUMMARY OF THE INVENTION; BRIEF DESCRIPTION OF DRAWINGS; DETAILED DESCRIPTION OF EXEMPLARY EMBODIMENTS OF THE INVENTION"

### ***Claim Objections***

8. Claims 1 – 19 are objected to because of the following informalities: there are numerous grammatical and syntax errors, for example "... each of which group..." etc. The applicant is advised to review all claims and make appropriate correction as necessary. Appropriate correction is required

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 6 & 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The applicant must clearly define and clearly claim the scope of the invention, the phrase "by means of the light driver in a given way defined in the application" is indefinite.

10. Regarding claim 19, the word "means" is preceded by the word(s) "software" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

***Claim Rejections - 35 USC § 101***

11. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 18 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The preamble recites software". The claimed "software" is not a "process" under 35 U.S.C. 101 because it is not a series of steps. The claimed "software" has no physical structure, does not itself perform any useful, concrete and tangible result and, thus, does not fit within the definition of a machine. The claimed "software" is not matter, but a form of "data structure" or "computer language instructions", and therefore is not a composition of matter. And lastly, because a "programming code" lacks physical substance and is not a residual class of product, a claimed signal does not fall within the definitions of manufacture. Therefore, a claimed signal does not constitute patentable subject matter as set forth in 35 U.S.C. 101. As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

In view of the below cited MPEP section the claims are non-statutory because they are functional descriptive material per se.

Claim 19 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The preamble recites "System". The claimed "system" is not a "process" under 35 U.S.C. 101 because it is not a series of steps. The claimed "software" has no physical structure, does not itself perform any useful, concrete and tangible result and, thus, does not fit within the definition of a machine. The claimed "system" is not matter, but a form of "data structure" or "computer language instructions", and therefore is not a composition of matter. And lastly, because a "programming code" lacks physical substance and is not a residual class of product, a claimed



signal does not fall within the definitions of manufacture. Therefore, a claimed signal does not constitute patentable subject matter as set forth in 35 U.S.C. 101. As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

In view of the below cited MPEP section the claims are non-statutory because they are functional descriptive material per se.

**MPEP 2106.01 [R-5]**

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) Both types of "descriptive material" are nonstatutory when claimed as descriptive material per se, 33 F.3d at 1360, 31 USPQ2d at 1759.

***Claim Rejections - 35 USC § 102***

- (b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claim 1- 13, 18 & 19 are rejected under 35 U.S.C. 102(b) as being unpatentable over Newton (US. Pub. 20020118177 A1).

*Claim 1.*

In regard to claim 1, *a portable device provided with a display unit with information-indicating light units in the surroundings of said display unit, characterized in that the portable device comprises*; See at least (Newton; Fig. 1; [0036]) – for a mobile or portable device with a display with information-indicating light units or emitters in the surroundings of said display.

With regard to the limitation of *a controller for defining control commands on the basis of a display unit application and an instantaneous view shown in the display unit*; See at least (Newton; Fig. 1; [0030]) – for a “...processor 102, controlled by the operating system 117, may be configured to execute the computer-executable instructions of the "Information Display" program module 119, the "Touch Panel Control" program module 121, and/or other program modules in order to perform or facilitate the methods of the present invention.”

With regard to the limitation of *a light driver for controlling the information-indicating light units based on the control commands*, See at least (Newton; Fig. 1; [0015], [0023] & [0027]) – for a processor or controller executing control commands to the System Interfaces (Item 106) to control the emitters. A “... processor may also execute computer executable instructions for controlling activation of the emitters.” & “... system interfaces enable the processor 102 to communicate with peripheral devices...”

With regard to the limitation of *such that the information-indicating light units are arranged to indicate information concerning an object located outside the current view of the display unit*; (Newton; Fig. 1; [0030]) – for emitters in an arrangement to indicate information regarding an object or entity located outside the current view of the display unit.

*Claim 2.*

In regard to claim 2, *characterized in that said device also includes a controller for generating control commands for the light units on the basis of the information transmitted by the display driver, to the light driver*; See at least (Newton; Fig. 1; [0027 - 0028]) – for a processor for generating control commands for the emitters on the information send by a display screen interface “...display screen interface 114 provides an interface between the processor 102 and a display screen...” to a Input/Output (“I/O”) port interface “...116 may be provided as interfaces between the processor 102 and various input devices and/or various output devices...”

*Claim 3.*

In regard to claim 3, *characterized in that in the surroundings of the display unit, there are at least two light units or light unit groups formed of single light units, placed so that they are arranged at an angle of 90 degrees with respect to each other*; See at least (Newton; Fig. 1) - where emitters are place at an angle of 90 degrees with respect to each other.

*Claim 4.*

In regard to claim 4, *characterized in that the light units are placed around the display unit*; See at least (Newton; Fig. 1) – for emitters are placed around the display screen.

*Claim 5.*

In regard to claim 5, *characterized in that it is provided with a light driver for controlling the light units or the light unit groups formed of single light units*; See at least (Newton; Fig. 1; 0028 - 0031) – a Input/Output ("I/O") port interface "...116 may be provided as interfaces between the processor 102 and various input devices and/or various output devices..." for controlling at least 2 emitters groups formed of at least one single emitters.

*Claim 6.*

In regard to claim 6, *characterized in that it is provided with a controller and a light driver for controlling the light units according to the application shown in the display unit*; See at least (Newton; Fig. 1; [0010] & [0025 – 0031]) – a processor and a light input/output interface for controlling the emitters according to the application shown on the display. "...a display screen for displaying information is positioned relative to the interior side of the protective barrier. Also positioned relative to the interior side of the protective barrier is a plurality of emitters adapted for emitting energy beams and at least one detector adapted to detect the energy beams emitted by at least one of the emitters..."

*Claim 7.*

In regard to claim 7, *characterized in that it is provided with a controller for defining the control commands of the light units and for synchronizing the display unit with respect to the view*; See at least (Newton; Fig. 1 & 5; [0025 – 0031] & [0066 - 0067]) – a processor for executing control instructions of the emitters and the circuits, and determining the display unit with respect to the image or picture.

*Claim 8.*

In regard to claim 8, *characterized in that it is provided with a light driver for controlling the functions and properties of the light units according to the control commands generated by the controller*; See at least (Newton; Fig. 1; [0025 – 0031]) – a light input/output interface for controlling functions and properties of the emitter according to the control commands predetermined by the controller.

*Claim 9.*

In regard to claim 9, *A method for improving information execution capability of a display unit of a portable device*; See at least (Newton; Fig. 1; [0005 & 0030]) – for a method of the invention.

With regard to the limitation of *where in the surroundings of the display unit there are placed information indicating light units characterized in that the method comprises steps of*; See at least (Newton; Fig. 1; [0036]) – for a display with information-indicating light units or emitters in the surroundings of said display.

With regard to the limitation of *defining in a controller of the portable device a control command on the basis of a display unit application and an instantaneous view shown in the display unit in order to control the information-indicating light units*; See at least (Newton; Fig. 1; [0030]) – for a “...processor 102, controlled by the operating system 117, may be configured to execute the computer-executable instructions of the "Information Display" program module 119, the "Touch Panel Control" program module 121, and/or other program modules in order to perform or facilitate the methods of the present invention.” in order to command the emitters.

With regard to the limitation of *controlling the information-indicating light units through a light driver based on the control command defined in the controller*, See at least (Newton; Fig. 1; [0015] & [0027]) – for a processor or controller executing control commands to the System Interfaces (Item 106) to control the emitters. A “... processor may also execute computer executable instructions for controlling activation of the emitters.” & “... system interfaces enable the processor 102 to communicate with peripheral devices...”

With regard to the limitation of *such that information concerning an object located outside the current view of the display unit is indicated by means of the information-indicating light units*. (Newton; Fig. 1; [0030]) – for emitters in an arrangement to indicate information regarding an object or entity located outside the current view of the display unit.

*Claim 10.*

In regard to claim 10, *characterized in that in the controller, there are generated functional commands to the light driver in order to control the light units on the basis of the information of the view in the display unit, transmitted by the display driver and the application of the display unit.* See at least (Newton; Fig. 1; [0027 - 0028]) – for a processor for generating control commands for the emitters on the in formation send by a display screen interface 25 and the application program stored in the memory base on the display “...display screen interface 114 provides an interface between the processor 102 and a display screen...” to a Input/Output (“I/O”) port interface “...116 may be provided as interfaces between the processor 102 and various input devices and/or various output devices...”

*Claim 11.*

In regard to claim 11, *characterized in that the light units are arranged in the surroundings of the display unit, at an angle of 90 degrees with respect to each other, in order to indicate the direction, with respect to the view shown in the display unit, by means of the light units;* See at least (Newton; Fig. 1) -where emitters are place at an angle of 90 degrees with respect to each other.....

*Claim 12.*

In regard to claim 12, *characterized in that the light units are arranged in light unit groups,* See at least (Newton; Fig. 1) – for emitters arranged in groups.

With regard to the limitation of *each of which groups can be separately controlled by the light driver*; See at least (Newton; Fig. 1; [0015]) Newton shows the system interface can control emitter separately, “each emitter is activated and deactivated according to a sequence.” which has a functional equivalence of this limitation.

*Claim 13.*

In regard to claim 13, *characterized in that in the display unit, there are shown objects under observation*, See at least (Newton; Fig. 1 & 5) – for shown objects under observation.

With regard to the limitation *and simultaneously the light units controlled by the light driver are used for generating information in the view of the display*; See at least (Newton; Fig. 1; [0031]) – for emitters control by the command interface are used to help generating information in the view of the display.

*Claim 18.*

In regard to claim 18, *a software for improving information execution capability of a display unit of a portable device*, See at least (Newton; Fig. 1; [0030]) – for computer executable instructions.

With regard to the limitation *characterized in that it includes steps: there is defined a given controllable light unit group composed of light units arranged in the surroundings of the display unit on the basis of the application and an instantaneous view shown in the display unit*;



See at least (Newton; Fig. 1 & Fig. 5; [0028]) – for controllable emitter group composed of light units arranged in the surrounding of the display on the basis of the application and a real time view shown in the display.

With regard to the limitation *there are generated, on the basis of the application of the display unit, certain control commands in order to control the defined light unit group according to the application*; See at least (Newton; Fig. 1; [0030]) – for a “...processor 102, controlled by the operating system 117, may be configured to execute the computer-executable instructions of the "Information Display" program module 119, the "Touch Panel Control" program module 121, and/or other program modules in order to perform or facilitate the methods of the present invention.” in order to command the emitters.

With regard to the limitation *and the instantaneous view of the display unit and an object located outside the current view, and*; (Newton; Fig. 1; [0030]) – for emitters in an arrangement to indicate information regarding an object or entity located outside the current view of the display unit.

With regard to the limitation *the generated control commands are transmitted to a light driver in order to control the defined light unit group for giving information about the object located outside the current view of the display unit*. See at least (Newton; Fig. 1; [0015] & [0027]) – for a processor or controller executing control commands to the System Interfaces (Item 106) to control the emitters. A “... processor may also execute computer executable

instructions for controlling activation of the emitters.” & “... system interfaces enable the processor 102 to communicate with peripheral devices...”

*Claim 19.*

In regard to claim 19, *a system for improving information execution capability of a display unit of a portable device*, See at least (Newton; Fig. 1; [0030] – [0031]) – for computer executable instructions and computer readable medium.

With regard to the limitation *characterized in that it includes software means for defining a controllable light unit group on the basis of the information of the application shown in the display unit and an object located outside the current view of the display unit, and*; See at least (Newton; Fig. 1; [0015], [0027] – [0030]) – for a processor or controller executing control command instructions or software to the System Interfaces (Item 106) to control the emitters. A “... processor may also execute computer executable instructions for controlling activation of the emitters.” & “... system interfaces enable the processor 102 to communicate with peripheral devices...” which cost the emitters in an arrangement to indicate information regarding an object or entity located outside the current view of the display unit.

With regard to the limitation *software means for generating certain control commands on the basis of the information of the application of the display unit and the object located outside the current view of the display unit in order to control a given light unit group for giving information about the object located outside the current view of the display unit*. See at least

(Newton; Fig. 1; [0015], [0027] – [0030]) – for a processor or controller executing control command instructions or software to the System Interfaces (Item 106) to control the emitters. A “... processor may also execute computer executable instructions for controlling activation of the emitters.” & “... system interfaces enable the processor 102 to communicate with peripheral devices...” which cost the emitters in an arrangement to indicate information regarding an object or entity located outside the current view of the display unit.

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

14. Claim 14, 16, & 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newton in view of Sindle (US 4015232).

*Claim 14.*

In regard to claim 14, *characterized in that the approaching of an object located outside the view of the display unit to the area of the view shown in the display unit is indicated by generating in the light driver a sense stimulus by means of those light units that are located in the same direction with respect to the view as the target in question.* Newton discloses outside image or view on the display is indicated by generating in the light command interface, and the emitter units can respond to an approaching outside object [0027 – 0036], but fails to disclose emitters that are located in the same direction with respect to the view as the target or object in question. However, Sindle discloses “A plurality of warning lights 212-223 are disposed along the periphery of the simulated vehicle for providing an indication by lighting of the appropriate portion of the vehicle which is in danger of being too close to an object.” (Col. 3 line 44 – Col. 4 line 20) which shows a plurality of light located in the same direction with respect to the view will unquestionably indicated the target or the object in question. Since, Newton and Sindle's inventions are the analogous art addressing a peripheral sensing system. Therefore, it would have been obvious for one of ordinary skill in the art at the time of invention to combine the emitters around the display of Newton with the directional warning light of Sindle to enhance the

directional detection as a whole to give the user a better insight of foreseen obstacle.

*Claim 16.*

In regard to claim 16, *characterized in that the threatening factors of the game application represented in the view are indicated by adjusting the controllable light unit group that is located in the direction of the threatening factor with respect to the view by means of the light driver to emit a given wavelength of light and possible proceeding directions are indicated by controlling the controllable light unit group that is located in the direction of the proceeding direction with respect to the view by means of the light driver to emit another given wavelength of light.* Newton discloses computer executable instructions or an application for displaying an image or view on the display through the command interface, and the controllable emitter groups can respond to an approaching outside object by emitting light. [0027 – 0036], but fails to disclose a threatening factor associated with the proceeding direction of the object by the emitter units using another wavelength. However, Sindle discloses “A plurality of warning lights 212-223 are disposed along the periphery of the simulated vehicle for providing an indication by lighting of the appropriate portion of the vehicle which is in danger of being too close to an object.” & warning lights can emit a different wavelength for the appropriate direction “For example, the front lights could be red, the rear lights could be yellow, the right side could be blue, and the left side could be green.” (Col. 3 line 44 – Col. 4 line 20) which shows a plurality of light located in the same direction with respect to the view will unquestionably indicated the target or the object in question with a warning factor for a potential threat by using varies of wavelength. Since, Newton and Sindle's inventions are the analogous art addressing a peripheral

sensing system. Therefore, it would have been obvious for one of ordinary skill in the art at the time of invention to combine the emitters around the display of Newton with the directional warning light equipped with adjustable multi-wavelengths of Sindle to improve and boost the multi-directional detection as a whole to give the user a better insight of foreseen obstacle according to the threat level.

*Claim 17.*

In regard to claim 17, *characterized in that in the application shown in the view, the direction of a given searched target that is located outside the view, with respect to the view is indicated by activating the controllable light unit group located in the direction of the target by means of the light driver in a given way defined in the application.* Newton discloses computer executable instructions or an application for displaying an image or view on the display through the command interface, and the controllable emitter groups can respond to an approaching outside object by emitting light. [0027 – 0036], but fails to disclose activating emitter group located in the direction of the search target. However, Sindle discloses “A plurality of warning lights 212-223 are disposed along the periphery of the simulated vehicle for providing an indication by lighting of the appropriate portion of the vehicle which is in danger of being too close to an object.” (Col. 3 line 44 – Col. 4 line 20) which shows a plurality of light located in the same direction with respect to the view will unquestionably indicated the target or the object in question. Since, Newton and Sindle's inventions are the analogous art addressing a peripheral sensing system. Therefore, it would have been obvious for one of ordinary skill in the art at the

time of invention to combine the emitters around the display of Newton with the directional warning light of Sindler to enhance the directional detection as a whole to give the user a better insight of foreseen obstacle.

15. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Newton in view of Lengyel (US 6016150).

*Claim 15.*

In regard to claim 15, *characterized in that the light driver is used for controlling a controllable light unit group, located in a given direction with respect to the view of the display unit*, See at least (Newton; Fig. 1) – for a command interface for controlling a controllable emitter group, located in a predetermined direction with respect to the view of the display.

With regard to the limitation *so that the intensity of the light units is increased as the object approaches the display unit*; Newton discloses emitter groups emit light around a display, but fails to disclose the intensity varies when an object approaches near the display. However, Lengyel discloses “As the light source moves toward or away from the surface of the object, the intensity of the light at the surface also changes.” (Col. 20 line 1 – 14) which has a functional equivalence of this limitation. Since, Newton and Lengyel the analogous art both address a graphic rendering system. Therefore, it would have been obvious for one of ordinary skill in the art at the time of invention to combine the emitters around the display of Newton with the varying intensity of light to detect the change of the distance of Lengyel, because it will allow

the user to be more aware of surroundings.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAKEE FANG whose telephone number is (571)270-7219. The examiner can normally be reached on Monday-Friday 9AM-5PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patel Ramesh can be reached on (571)272-3688. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PAKEE FANG/  
Examiner, Art Unit 4146

/Ramesh B. Patel/  
Supervisory Patent Examiner, Art Unit 4146